STATE OF MARYLAND

DHMH

Maryland Department of Health and Mental Hygiene
201 W. Preston Street, Baltimore, Maryland 21201

Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – John M. Colmers, Secretary

Office of Preparedness & Response
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April 25, 2008
Public Health & Emergency Preparedness Bulletin: # 2008:16
Reporting for the week ending 04/19/08 (MMWR Week #16)

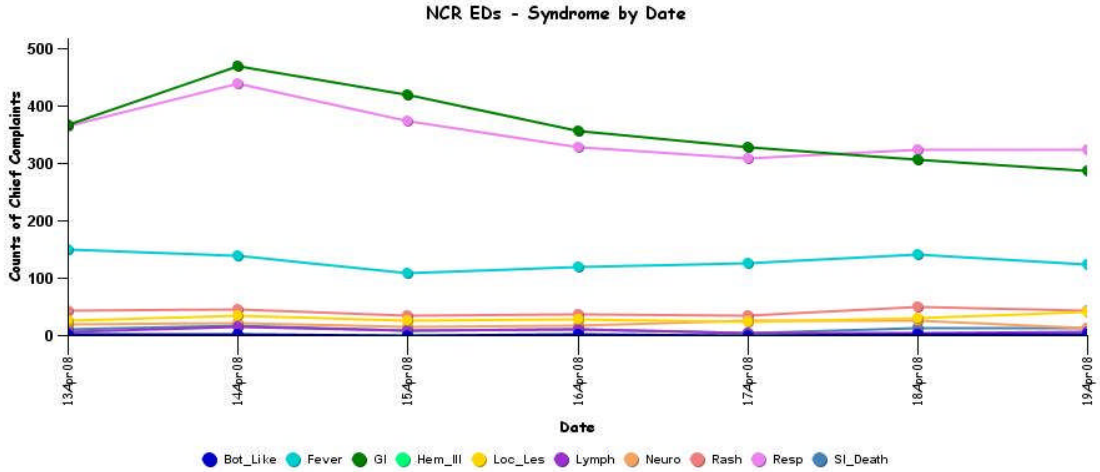
CURRENT HOMELAND SECURITY THREAT LEVELS

National: **Yellow (ELEVATED) *The threat level in the airline sector is Orange (HIGH)**
Maryland: **Yellow (ELEVATED)**

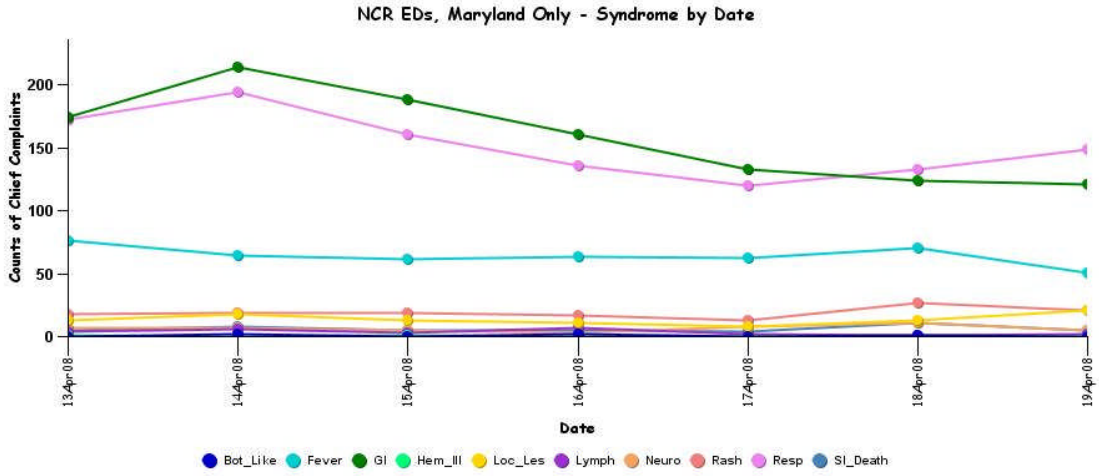
SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts only. Note: ESSENCE – ANCR Spring 2006 (v 1.3) now uses syndrome categories consistent with CDC definitions.

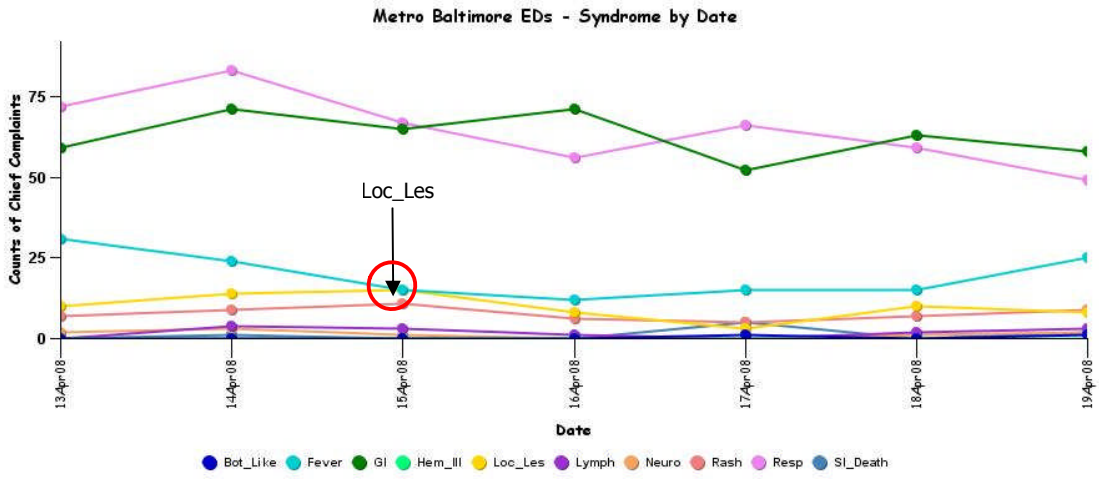
Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.



* Includes EDs in all jurisdictions in the NCR (MD, VA, DC) under surveillance in the ESSENCE system

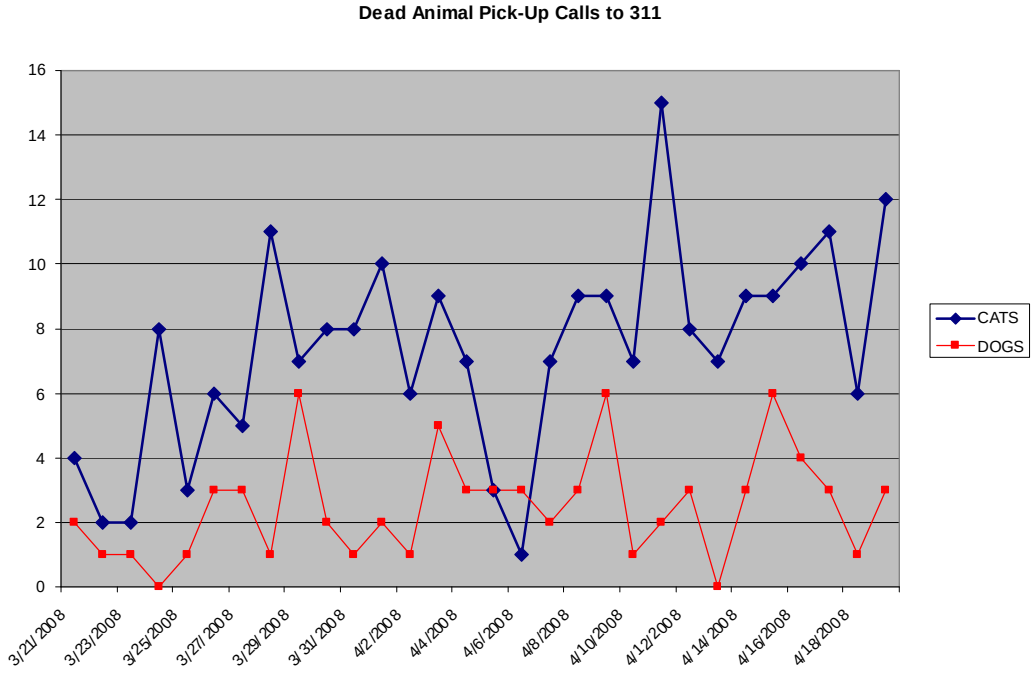


* Includes only Maryland EDs in the NCR (Prince George's and Montgomery Counties) under surveillance in the ESSENCE system



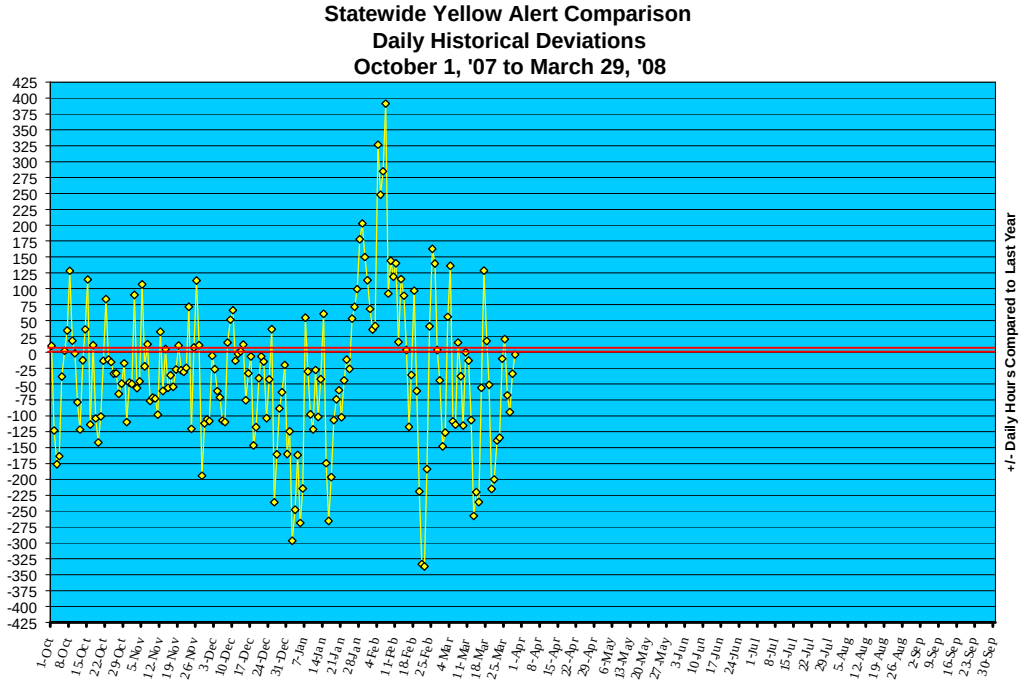
* Includes EDs in the Metro Baltimore region (Baltimore City and Baltimore County) under surveillance in the ESSENCE system.

BALTIMORE CITY SYNDROMIC SURVEILLANCE PROJECT: No suspicious patterns in the medic calls, ED Syndromic Surveillance and the animal carcass surveillance. Graphical representation is provided for animal carcass surveillance 311 data.



REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/06.
*Note: No new data available at this time.



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to BT for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in March 2008 did not identify any cases of possible terrorism events.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	**Aseptic**	**Meningococcal**
New cases (Apr 13 - 19, 2008):	12	1
Prior week (Apr 6 - 12, 2008):	13	0
Week#16, 2007 (Apr 14 - 20, 2007):	1	2

OUTBREAKS: 5 outbreaks were reported to DHMH during MMWR Week 16 (Apr.13-Apr. 19, 2008):

4 Gastroenteritis outbreaks
1 outbreak of GASTROENTERITIS associated with a Nursing Home
1 outbreak of GASTROENTERITIS associated with an Assisted Living Facility
1 outbreak of GASTROENTERITIS associated with a School
1 outbreak of GASTROENTERITIS associated with a Conference

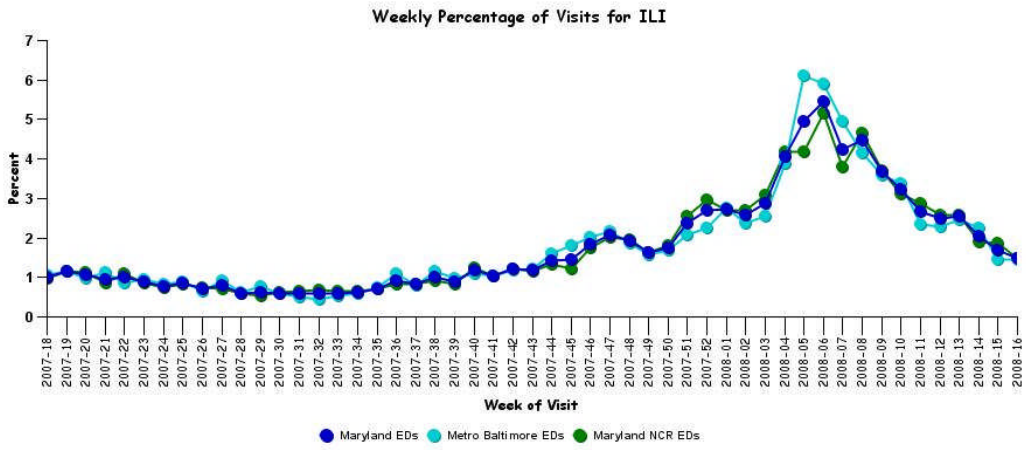
1 Foodborne Gastroenteritis outbreak
1 outbreak of FOODBORNE GASTROENTERITIS associated with a Restaurant

MARYLAND SEASONAL FLU STATUS:

Seasonal Influenza reporting occurs October through May. To date this season, there have been 3630 lab confirmed influenza cases in Maryland. Maryland's influenza activity level for this week is LOCAL.

SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS:

Graph shows the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. This graph does not represent confirmed influenza.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO Pandemic Influenza Phase: Phase 3/4: No or very little human-to-human transmission/Small clusters with limited human-to-human transmission, suggesting that the virus is not well adapted to humans

US Pandemic Influenza Stage: Stage 0/1: New domestic animal outbreak in at-risk country/Suspected human outbreak overseas

*More information regarding WHO Pandemic Influenza Phase and US Pandemic Influenza Stage can be found at: http://bioterrorism.dhmh.state.md.us/flu.htm

WHO update: As of April 17, 2008, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 381, of which 240 have been fatal. Thus, the case fatality rate for human H5N1 is about 63%.

AVIAN INFLUENZA (South Korea): 15 Apr 2008, South Korea said on Apr 15 it was investigating 4 new suspected cases of bird flu, including one near Seoul, adding to a string of recent outbreaks and raising concerns the disease may be spreading across the country. In less than 2 weeks, South Korea has confirmed 11 cases of the deadly H5N1 strain, but all have been contained to the southwest of the country in North and South Jeolla provinces, some 320 km south of Seoul. "We have received 4 fresh reports of suspected bird flu cases on Apr 14 and one is from a poultry farm in Pyongtaek city in Kyonggi province," the Farm Ministry said in a statement. The ministry said later in the day that the farm in Pyongtaek, around 60 km south of Seoul, was tested positive for H5 and more detailed results would be available on Apr 17. It said more than 2000 birds at the farm would be slaughtered on Tuesday and it had stopped the shipment of birds within a 10-km radius of the affected site. South Korea, which has culled nearly 2 million poultry this month, said it would continue quarantine work in suspected areas and encourage poultry consumption amid rising consumer concern. Duck and chicken prices have dropped 10 percent this month, while chicken sales at 4 major retailers surveyed by the ministry showed a 20 percent decline. South Korea had 7 outbreaks of H5N1 between November 2006 and March 2007 and spent 59.22 million dollars on quarantine measures.

AVIAN INFLUENZA, HUMAN (Egypt): 18 Apr 2008, The Ministry of Health and Population of Egypt has announced a new human case of avian influenza A (H5N1) virus infection. The patient is a 2-year-old male from Al-Honsanya, Sharkea Governorate. He developed symptoms on Apr 13 and was hospitalized on Apr 14 and is currently in hospital. The patient was confirmed as being infected with A (H5N1) by the Central Public Health Laboratories and by Cairo-based US Naval Medical Research Unit 3 (NAMRU-3). Investigations into the source of his infection indicate a history of contact with sick and dead poultry. Of the 50 cases confirmed to date in Egypt, 22 have been fatal.

NATIONAL DISEASE REPORTS:

TOXIC ELEMENTS, DIETARY SUPPLEMENTS, ALERT (Multi State): 15 Apr 2008, The CDC is working collaboratively with state health departments, the American Association of Poison Control Centers, and the U.S. Food and Drug Administration (FDA) on reports of adverse health effects following consumption of the dietary supplement "Total Body Formula," and "Total Body Mega Formula" manufactured in the USA exclusively for Total Body Essential Nutrition, Inc. This dietary supplement has been found by the FDA to contain hazardous levels of selenium, up to 200 times the label value, and chromium, up to 17 times the label value. An FDA press release on Apr 9 detailed information regarding the level of selenium in the product. The FDA is advising consumers to stop using "Total Body Formula" in flavors Tropical Orange and Peach Nectar and "Total Body Mega Formula" in the Orange/Tangerine flavor and discard them by placing them in a trash receptacle outside of the home. "Total Body Formula" products are sold in 8-ounce and 32-ounce plastic bottles. "Total Body Mega Formula" is sold in 32-ounce plastic bottles. As of Apr 11, 91 adverse reactions have been reported from Florida, Georgia, Kentucky, Pennsylvania, Tennessee, and Virginia health departments. The American Association of Poison Control Centers and the FDA report additional exposures in other states. Total Body Essential Nutrition, Inc reportedly distributed this product to 16 states (Alabama, California, Florida, Georgia, Kentucky, Louisiana, Michigan, Missouri, New Jersey, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, Texas, and Virginia), and also sells its products over the Internet. Excessive intake of selenium is known to cause the following symptoms: significant hair loss, muscle cramps, diarrhea, joint pain, fatigue, loss of finger nails and blistering skin. Excessive intake of chromium may result in the following symptoms: renal failure, elevated hepatic enzymes, thrombocytopenia, hemolysis, changes in thought processes, gastrointestinal disorders, chest pain, erythema/flushing/rash, dizziness, headache, agitation, and rhabdomyolysis. The CDC requests that consumers and clinicians who encounter patients with symptoms consistent with selenium and/or chromium poisoning report these cases to their local poison control center (PCC) at 1-800-222-1222. Medical personnel are available at PCCs to provide specific medical management advice and will make appropriate referral to state and local health authorities. Health care professionals and consumers are also encouraged to report adverse events to the FDA's MedWatch program at 800-FDA-1088. (Food Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

SALMONELLOSIS, SEROTYPE AGONA, BREAKFAST CEREAL (Multi State): 16 Apr 2008, The CDC is collaborating with public health officials in multiple states across the USA and with the FDA to investigate a multi-state outbreak of Salmonella enterica serotype Agona infections. An investigation that includes interviews of persons with S. Agona infections and comparison of the DNA fingerprints suggests that cereal from Malt-O-Meal unsweetened Puffed Rice Cereals and unsweetened Puffed Wheat Cereals is likely related to these illnesses. As of Apr 11, state and city health departments from 13 states identified 21 ill persons infected with S. Agona with the same genetic fingerprint. Ill persons with the outbreak strain have been reported from California (1), Colorado (1), Delaware (1), Maine (3), Massachusetts (2), Minnesota (1), North Dakota (1), New Hampshire (2), New Jersey (3), New York (3), Pennsylvania (1), Rhode Island (1), and Vermont (1). Illness onset dates, which are known for 9 patients, ranged from Jan 22 to Mar 2. Their ages range from 1 to 95 years; 62 percent are female. 3 hospitalizations and no deaths have been reported. On Apr 5, Malt-O-Meal Company initiated a recall after the company's routine food testing detected the presence of salmonellae on Mar 24 in a Minnesota plant that produces and packages dry cereals. Malt-O-Meal issued a recall of unsweetened Puffed Rice Cereals and unsweetened Puffed Wheat Cereals produced during the past 12 months at the plant in Minnesota. On Apr 7, PulseNet, the molecular subtyping network for foodborne disease surveillance, notified CDC's OutbreakNet Team of a cluster of human S. Agona isolates with an indistinguishable PFGE pattern in multiple states. On Apr 10, CDC was informed by several state health departments that patients infected with S. Agona with the outbreak pattern had eaten Malt-O-Meal cereal products. On Apr 11, the Minnesota State Public Health Department confirmed that the Salmonella isolate isolated from the Minnesota plant was S. Agona and had the same indistinguishable PFGE pattern as the isolates from ill humans. CDC, multiple state health departments, and FDA are working collaboratively to identify additional cases and determine the source and factors that contribute to this outbreak. Updated information from CDC can be found at http://www.cdc.gov/salmonella/agona/. (Food Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

INTERNATIONAL DISEASE REPORTS:

ANTHRAX, HUMAN, LIVESTOCK (Ghana): 15 Apr 2008, Following the death of 3 persons at Biembog, near Woriyanga in the Garu-Tempane district, through the outbreak of anthrax, the Upper East Regional office of the Ministry of Food and Agriculture (MOFA), has deployed a team of veterinary officers to the area, for a mass vaccination exercise against the disease. Dr. Thomas Anyorikeya, the Regional Veterinary Officer, said on Apr 13 that anthrax was endemic in the Garu-Tempane district and its environs, especially Biembog, where 3 people, including a child, have died after consuming the carcass of infected animals. He explained that since February this year, there has been a routine vaccination exercise in all the then 8 districts, now 9, in the region against the disease. He said on Mar 24, a bull died at a certain Kaka's house at Biembog, and the family members consumed the carcass. After consuming the carcass, some felt ill and were rushed to the Woriyanga Clinic. They were diagnosed as having anthrax, and when questioned by the health workers, whether or not they had consumed a carcass, they denied it. On Mar 28, one of the patients died of the disease, before his family members admitted that they had consumed the carcass of an infected animal. The health workers then reported the matter to the MOFA. Later 2 additional deaths were recorded. Dr. Anyorikeya said when the District Director reported the case to the regional office, more vaccines were immediately sent to the area, for them to vigorously embark on a mass vaccination exercise. The Regional Veterinary Officer, who mentioned respiratory problems, boils on the skin and diarrhea, as some of the symptoms of anthrax, said there were enough vaccines to carry out the exercise. He said it was GH20p per animal, and urged farmers to bring out their animals for the exercise. According to him, farmers who could afford upright payment would pay, but those who may not afford will be given 2 weeks to settle their debts. He said only cattle, sheep, goats and pigs will be vaccinated and advised farmers, who do not have money, to sell their guinea fouls to enable them settle the bills for the vaccination. Dr. Anyorikeya expressed worry about the inability of some farmers, who still owe the ministry, after the 2006 vaccination exercise, to settle their debts. He has since led a team of veterinary officers, from all the district capitals in the region, to Garu, to begin a mass vaccination exercise, starting on Apr 14. (Anthrax is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

CHOLERA (South Africa): 16 Apr 2008, 2 cholera cases have been confirmed in Soweto, the Gauteng department of health said on Apr 16. Spokesperson Zanele Mngadi said the 2 cases were confirmed last week at the Chicken Farm informal settlement in Kliptown, Soweto. "The source of infection has not been established, but an urgent investigation is underway to establish the source, identify and treat possible cases and ensure no further spread of this illness. Water samples have been taken and the result returned negative," she said. "Cholera is preventable and treatable," said Mngadi. "If tap water is not available, fresh water should be collected every day, treated and stored in clean containers with covers," she added. (Water Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

CHIKUNGUNYA (India): 17 Apr 2008, More than 500 suspected chikungunya cases were detected in the district of Mangalore, Karnataka state. Statistics available at the District Health and Family Welfare Department (DHFWD) warn of an 'uncontrollable outbreak of the disease in the district', if not checked at the earliest. As per data available with the DHFWD, around 530 suspected chikungunya cases were reported from Sullia and Puttur taluks. It was found through door-to-door survey and surveillance records that around 1787 people were suffering from high fever in Sullia and Puttur taluks. The absence of a clinical diagnosis process in the district to confirm chikungunya as early as possible has the administration sitting astride the horns of a dilemma. DHFWD officer Dr H Jagannath said that the department could not confirm chikungunya as there was no laboratory facility in the district to diagnose the disease. He said that the

government had promised 100 rapid chikungunya test kits before Apr 16. "INR 4.5 lakh had been sanctioned under the vector borne disease control program for the district," he said, adding that necessary steps would be taken to check the spread of disease. Dr Jagannath said that 2 nodal officers were appointed for Sullia and Puttur taluks. The department has also deputed 3 doctors to the taluks and 3 mobile medical teams with ambulances were also sent to the taluks. Jagannath said that a joint survey by the entomology experts and the joint director of the Malaria and Filaria Cell was conducted on Apr13-15; a total of 12 drug distribution centers were functioning in the 2 taluks. Precautionary measures including fogging, spraying, and awareness programs were started in the taluks for the effective prevention of the spread of chikungunya, but proper diagnosis is still a necessary first step that can no longer be delayed. (Emerging Infectious Diseases are listed in Category C on the CDC list of Critical Biological Agents) *Non-suspect case

CHOLERA (Namibia): 18 Apr 2008, The cholera outbreak that has so far been confined to the Ohangwena Region has now spread to Oshana too, regional Health Director Dr. Naftali Hamata said Apr 17. In his weekly report as health coordinator for the northern flood response, Dr. Hamata said 2 suspected cases of cholera had been reported at the Oshakati State Hospital, of which 1 had been confirmed. The epidemic in Ohangwena is continuing, with the latest count standing at 1219 suspected cases, with 13 deaths. Neither Omusati nor Oshikoto has reported any cholera cases so far. (Water Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

CHOLERA (Tanzania): 18 Apr 2008, An outbreak of cholera in Kibosho, Moshi Rural district of Tanzania on Apr 17 claimed 1 life while an unspecified number of people were being treated in hospitals and health centers. Reports from the area, about 15 kilometers from Moshi on the slopes of Mt. Kilimanjaro, say the situation was getting out of hand. The critically hit area is Kibosho division, with scores of residents in the area said to be in a critical condition. Vincent Msacky, an assistant medical officer at a hospital there, said the situation was critical and appealed for support from district and regional authorities to contain it. Mr. Msacky also said health facilities available cannot cope with the epidemic which been occurring over the past 2 weeks. Unconfirmed reports say the number of people suffering from the disease could be higher than has been reported. The cholera outbreak has created a scare in neighboring villages in Uru, including Kirima Mashariki, Maua, Singa and Uru Mawella. (Water Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

CHOLERA (Kenya): 18 Apr 2008, A cholera outbreak in Kenya has killed 67 people so far in 2008, United Nations agencies said on Apr 18. Nearly 1300 cases of cholera, a water-borne disease, have been reported in the east African country since January 2008, the WHO said. More than half are in western Nyanza province along Lake Victoria which has also had the most deaths, while an outbreak in the east near the border with Somalia has abated, it said. "The number of new cases each week is dropping, which is rather reassuring," WHO's global cholera coordinator Claire-Lise Chaignat said. (Water Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

CHOLERA (Viet Nam): 18 Apr 2008, As many as 70 new acute diarrhea patients from 10 Vietnamese cities and provinces were hospitalized on Apr 17, of whom 3 tested for cholera, a local newspaper quoted the Vietnamese Health Ministry as reporting on Apr 18. The new cases have raised the total number of acute diarrhea patients in the country's 19 cities and provinces to over 1800, including 326 cholera sufferers, since Mar 5. Most of acute diarrhea sufferers were from Hanoi, Hai Phong city and the 2 provinces of Ha Tay and Thanh Hoa in the northern region. Viet Nam has experienced 3 acute diarrhea outbreaks which affected about 4000 people, of whom some 700 have been positive for cholera since last October 2007. (Water Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

OTHER RESOURCES AND ARTICLES OF INTEREST:

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://bioterrorism.dhmh.state.md.us/

Man at center of Las Vegas ricin case arrested, charged
An unemployed graphic designer who authorities believe was nearly killed by ricin was arrested April 16 on federal charges of possessing the deadly toxin in what he described as an "exotic idea," never carried out, to poison unspecified enemies. (http://ap.google.com/article/ALeqM5jHS90ne-2-wjkHu_N158TrQ_wJpwD90351B03)

Chapare Virus, a Newly Discovered Arenavirus Isolated from a Fatal Hemorrhagic Fever Case in Bolivia
A team of Bolivian health authorities, US Navy health experts based in Lima, Peru, and the US Centers for Disease Control and Prevention has characterized "Chapare arenavirus," a previously unrecognized arenavirus, discovered in serum samples from a patient in rural Bolivia who eventually died of the infection. A full report of the study is published 18 Apr 2008 in the open-access journal PLoS Pathogens. Viral hemorrhagic fevers are listed in Category A on the CDC list of Critical Biological Agents. (http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=2277458)

Update: Influenza Activity - United States, September 30, 2007-April 5, 2008, and Composition of the 2008-09 Influenza Vaccine

This report summarizes U.S. influenza activity since the start of the 2007--08 influenza season, and updates the previous summary. Low levels of influenza activity were reported from October through early December. Activity increased from mid-December and peaked in mid-February. (http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5715a4.htm)

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NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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